

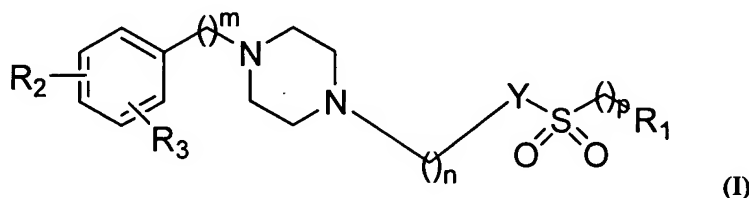
AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of the claims pending in this application. Claims 13-17, 19-29, 38, 40, 44, 50, 52, 57-58, 68-72, 84-85 and 87-97 have been cancelled without prejudice to their subsequent introduction into this or related applications.

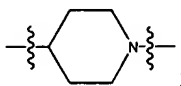
CLAIMS

What is claimed is:

1. (currently amended) A compound having the formula



wherein

- R_1 is unsubstituted alkyl or cycloalkyl;
- R_2 and R_3 independently are hydrogen, nitro, lower alkoxy, or $-NR_4R_5$, provided that R_2 and R_3 are not both hydrogen;
- R_4 and R_5 are independently H, lower alkyl; COR_6 or SO_2R_6 , where R_6 is lower alkyl or cycloalkyl;
- Y is NH, N(lower alkyl) or ;
- m is 0, 1, 2, 3, 4, 5, or 6;
- n is 1, 2, 3, 4, 5, or 6;
- p is 0, 1, 2, 3, or 4; and pharmaceutically acceptable salts thereof.

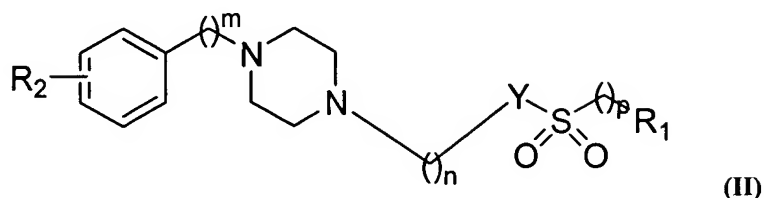
2. (currently amended) The compound of claim 1, wherein R₂ is selected from the group consisting of lower alkoxy; amino; nitro; NHCO-alkyl; NHCO-cycloalkyl; -N-(alkyl)-CO-alkyl; and -NHSO₂alkyl.
3. (currently amended) The compound of claim 2, wherein R₂ is nitro, NHCO-alkyl, -N-(alkyl)-CO-alkyl, or alkylamino; and R₃ is H.
4. (original) The compound of claim 3, wherein said NHCO-alkyl is NHCO-lower alkyl.
5. (currently amended) The compound of claim 4, wherein said NHCO-lower alkyl is NHCO-(CH₃), NHCO-(CH₂CH₃), NHCO-(CH₂CH₂-CH₃), or NHCO-(CH(CH₃)₂).
6. (original) The compound of claim 3, wherein R₂ is in the meta position.
7. (original) The compound of claim 1, wherein said lower alkyl or alkoxy is lower (C₁-C₄).
8. (currently amended) The compound of claim 1, wherein said cycloalkyl is (C₃-C₆).
9. (currently amended) The compound of claim 1, wherein R₁ is *n*-butyl, *s*-butyl, *i*-butyl, or cycloalkyl.
10. (currently amended) The compound of claim 1, wherein said cycloalkyl is cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, methylcyclohexyl, 2-methylcyclohexyl, or phenylcyclohexyl.
11. (original) The compound of claim 1, wherein m is 0.
12. (currently amended) The compound of claim 1, wherein n is 1 or 4.
13. (canceled)
14. (canceled)
15. (canceled)
16. (canceled)
17. (canceled)
18. (currently amended) A pharmaceutical composition comprising the compound of claim 1, and a pharmaceutically-acceptable carrier.

19. (canceled)
20. (canceled)
21. (canceled)
22. (canceled)
23. (canceled)
24. (canceled)
25. (canceled)
26. (canceled)
27. (canceled)
28. (canceled)
29. (canceled)
30. (currently amended) 4-Methyl-N-{4-[4-(3-nitro-phenyl)-piperazin-1-yl]-butyl}-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
31. (currently amended) 4-Methyl-N-{4-[4-(3-nitro-phenyl)-piperazin-1-yl]-butyl}-benzenesulfonamide HCl.
32. (currently amended) N-(3-{4-[4-(Toluene-4-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-butyramide; or pharmaceutically acceptable salts thereof.
33. (currently amended) 2,2-Dimethyl-N-(3-{4-[4-(toluene-4-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-propionamide; or pharmaceutically acceptable salts thereof.
34. (currently amended) N-(3-{4-[4-(Toluene-4-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-isobutyramide; or pharmaceutically acceptable salts thereof.

35. (currently amended) N-{4-[4-(3-Ethanesulfonylamino-phenyl)-piperazin-1-yl]-butyl}-4-methyl-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
36. (currently amended) 4-Methyl-N-(4-{4-[3-(propane-2-sulfonylamino)-phenyl]-piperazin-1-yl}-butyl)-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
37. (currently amended) 4-Methyl-N-{4-[4-(3-nitro-phenyl)-piperazin-1-yl]-butyl}-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
38. (canceled)
39. (currently amended) N-{4-[4-(2-Methoxy-5-nitro-phenyl)-piperazin-1-yl]-butyl}-4-methyl-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
40. (canceled)
41. (currently amended) N-{4-[4-(3-Methoxy-phenyl)-piperazin-1-yl]-butyl}-4-methyl-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
42. (currently amended) N-{4-[4-(3-Ethanesulfonylamino-phenyl)-piperazin-1-yl]-butyl}-4-methyl-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
43. (currently amended) N-{4-[4-(3-Methanesulfonylamino-phenyl)-piperazin-1-yl]-butyl}-4-methyl-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
44. (canceled)
45. (currently amended) N-[4-(4-Biphenyl-3-yl)-piperazin-1-yl]-butyl]-4-methyl-benzenesulfonamide; or pharmaceutically acceptable salts thereof.

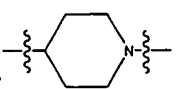
46. (currently amended) 4-Methyl-N-[4-(4-phenyl-piperazin-1-yl)-butyl]-benzenesulfonamide; or pharmaceutically acceptable salts thereof.
47. (currently amended) 1-cyclohexyl-N-(4-(4-(2-methoxyphenyl)piperazin-1-yl)butyl)methanesulfonamide; or pharmaceutically acceptable salts thereof.
48. (currently amended) N-(3-{4-[4-(Toluene-4-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-propionamide; or pharmaceutically acceptable salts thereof.
49. (currently amended) (3-{4-[1-(4-Fluoro-benzenesulfonyl)-piperidin-4-ylmethyl]-piperazin-1-yl}-phenyl)-dimethyl-amine; or pharmaceutically acceptable salts thereof.
50. (canceled)
51. (currently amended) 1-cyclohexyl-N-(4-(4-(3-(dimethylamino)phenyl)piperazin-1-yl)butyl)methanesulfonamide ; or pharmaceutically acceptable salts thereof.
52. (canceled)
53. (currently amended) N-(3-{4-[1-(4-Fluoro-benzenesulfonyl)-piperidin-4-ylmethyl]-piperazin-1-yl}-phenyl)-acetamide; or pharmaceutically acceptable salts thereof.
54. (currently amended) N-(3-{4-[4-(4-Fluoro-benzenesulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-acetamide; or pharmaceutically acceptable salts thereof.
55. (currently amended) 1-(2-Methoxy-phenyl)-4-[1-(toluene-4-sulfonyl)-piperidin-3-ylmethyl]-piperazine; or pharmaceutically acceptable salts thereof.

56. (currently amended) A compound having the formula



wherein

- R₁ is unsubstituted alkyl or cycloalkyl;
- R₂ selected from the group consisting of lower alkoxy; amino; nitro; NHCO-lower alkyl; NHCO-cycloalkyl; -N-(alkyl)-CO-alkyl; alkylamino; and NHSO₂alkyl;

- Y is NH, N(lower alkyl) or  ;
- m is 0, 1, or 2;
- n is 1, 2, 3, or 4; and
- p is 0 or 1; and pharmaceutically acceptable salts thereof.

57. (canceled)

58. (canceled)

59. (currently amended) The compound of claim 56, wherein said NHCO-lower alkyl is NHCO-(CH₃), NHCO-(CH₂CH₃), NHCO-(CH₂CH₂-CH₃), or NHCO-(CH(CH₃)₂).

60. (original) The compound of claim 56, wherein R₂ is in the meta position.

61. (original) The compound of claim 56, wherein said lower alkyl or alkoxy is lower (C₁-C₄).

62. (currently amended) The compound of claim 56, wherein said cycloalkyl is (C₃-C₆).

63. (currently amended) The compound of claim 56, wherein R₁ is *n*-butyl, *s*-butyl, *i*-butyl, or cycloalkyl.

64. (currently amended) The compound of claim 63, wherein said cycloalkyl is cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, methylcyclohexyl, or phenylcyclohexyl.
65. (original) The compound of claim 56, wherein m is 0.
66. (currently amended) The compound of claim 56, wherein n is 1 or 4.
67. (currently amended) The compound of claim 56, wherein p is 0 or 1.
68. (canceled)
69. (canceled)
70. (canceled)
71. (canceled)
72. (canceled)
73. (currently amended) Cyclopropanecarboxylic acid (3-{4-[4-(toluene-4-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-amide; or pharmaceutically acceptable salts.
74. (currently amended) N-(3-{4-[4-(Toluene-4-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-acetamide; or pharmaceutically acceptable salts thereof.
75. (currently amended) N-{3-[4-(4-Cyclohexylmethanesulfonylamino-butyl)-piperazin-1-yl]-phenyl}-acetamide; or pharmaceutically acceptable salts thereof.
76. (currently amended) N-{3-[4-(1-Cyclohexylmethanesulfonyl-piperidin-4-ylmethyl)-piperazin-1-yl]-phenyl}-acetamide; or pharmaceutically acceptable salts thereof.
77. (currently amended) Cyclopropanecarboxylic acid {3-[4-(4-cyclohexylmethanesulfonylamino-butyl)-piperazin-1-yl]-phenyl}-amide; or pharmaceutically acceptable salts thereof.

78. (currently amended) N-(3-{4-[1-(Propane-2-sulfonyl)-piperidin-4-ylmethyl]-piperazin-1-yl}-phenyl)-acetamide; or pharmaceutically acceptable salts thereof.
79. (currently amended) N-(3-{4-[4-(Propane-2-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-acetamide; or pharmaceutically acceptable salts thereof.
80. (currently amended) N-{3-[4-(4-Cyclohexanesulfonylamino-butyl)-piperazin-1-yl]-phenyl}-acetamide; or pharmaceutically acceptable salts thereof.
81. (currently amended) N-(3-{4-[4-(Cyclohexylmethanesulfonyl-methyl-amino)-butyl]-piperazin-1-yl}-phenyl)-acetamide; or pharmaceutically acceptable salts thereof.
82. (currently amended) N-(3-{4-[4-(2-Methyl-propane-1-sulfonylamino)-butyl]-piperazin-1-yl}-phenyl)-acetamide; or pharmaceutically acceptable salts thereof.
83. (currently amended) N-[3-(4-{4-[Methyl-(2-methyl-propane-1-sulfonyl)-amino]-butyl}-piperazin-1-yl)-phenyl]-acetamide; or pharmaceutically acceptable salts thereof.
84. (canceled)
85. (canceled)
86. (currently amended) A pharmaceutical composition comprising the compound of claim 56, and a pharmaceutically-acceptable carrier.
87. (canceled)
88. (canceled)
89. (canceled)
90. (canceled)

91. (canceled)
92. (canceled)
93. (canceled)
94. (canceled)
95. (canceled)
96. (canceled)
97. (canceled)
98. (new) The compound of claim 1, wherein p is 0 or 1.